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EXECUTIVE SUMMARY

The goal of this study is to provide information to Illinois citizens on prescription drug price differences in order to encourage comparison price shopping. Price shopping can mean big savings to Illinois residents who have no prescription drug benefit and have financial difficulty in obtaining their doctor prescribed medications. This report is based on surveys collected from over 200 pharmacies in Illinois. The data provide statewide drug price comparisons and more detailed comparisons among selected cities. The following is a summary of the findings:

The average price of a prescription in Illinois is just under \$50.00 for a 30-day supply.

- The average prescription price for 29 frequently prescribed drugs is \$48.88.
- Prevacid, used to treat ulcers and other stomach ailments, had the highest average price for one drug at \$135.01.
- Furosemide, a diuretic, had the lowest average price for a drug at \$7.82.

Statewide, there is considerable disparity in prescription drug prices.

- A drug to treat ulcer/GERD, Omeprazole, deviated \$12.88 from the average prescription price. This means a consumer could save, or be overcharged, an average of \$13.00.
- Comparing prices statewide, consumers could save up to 97% (\$57.91) on a prescription of Actos.
- Isosorbide Mononitrate, used to treat and prevent angina (chest pain) attacks, had the greatest difference between the highest and lowest price for a prescription— \$142.60.

Using generic instead of brand name drugs, along with comparing prices, can further reduce prescription drug costs.

- The generic drug Levothyroxine Sodium, a thyroid replacement, cost 42% less than the same brand name drug, Synthroid.
- In three Illinois communities, there were significant savings between the highest brand name price of Metoprolol Tartrate, a hypertension medication, and the lowest price of its generic version, Toprol XL. At local retail pharmacies, consumers could save 72% in Peoria, 67% in Chicago, and 60% in Murphysboro on these particular drugs.

There was little variation in savings from one area of the state to another.

• The highest percent difference in average drug prices was only 3% from one area of the state to another, representing a difference of only \$1.64 between rural and suburban areas.

- On average, the highest percent difference in drug prices was only 4% by region, representing a difference of \$1.79 between Cook County and Collar Counties.
- Surprisingly, there was little difference between the average prices of chain stores and independent stores—an average savings of only 3% could be realized at a chain over an independent.

At the same time, small geographic areas yielded considerable disparities in prescription drug prices.

- In three adjacent neighborhoods in Chicago, individuals could find savings of up to 69% on one drug.
- Peoria consumers could save up to 52% on a one-month prescription;
 Murphysboro consumers could save up to 27%.
- These findings are important because they demonstrate that consumers can realize considerable savings by comparison shopping within a short distance from their residence.

INTRODUCTION

Over the past several years, the number of drugs being prescribed has risen dramatically along with the cost of those drugs. Many factors contribute to this phenomenon, including: (1) an increase in the use of managed care, (2) better detection and treatment for chronic health conditions, and (3) the use of more expensive and heavily advertised drugs. These factors are further examined in the next section. At the same time, many citizens have no prescription drug coverage, which particularly affects low income workers and seniors. One solution to the problem of costly prescription drugs is for consumers to make price comparisons. Price shopping can save patients a considerable amount of money. This report from the Illinois Attorney General summarizes data collected from a statewide survey of pharmacies on the retail price of frequently prescribed drugs. The study will highlight the cost savings available to Illinois citizens who actively comparison price shop prior to purchasing their prescription drugs.

BACKGROUND

The High Cost of Prescription Drugs

In the U.S., both the cost and number of prescribed drugs continue to rise at rates higher than other health care costs and much higher than the rate of inflation. One study found that on average the cost of the 50 most frequently used drugs by the elderly increased 6% from 2002 to 2003, while the rate of inflation was 1.8% during the same time period.¹ National spending for prescription drugs increased from \$131.9 billion in 2001 to \$154.5 billion in 2002. By the year 2010, the projected amount of spending on

prescription drugs will be \$366 billion.² According to a Kaiser Family Foundation study³, the average cost of a prescription⁴ in Illinois is \$54.43, with total sales on prescription drugs statewide at just under \$7 billion.⁵ This places Illinois at number six among states in annual sales, representing 4% of U.S. retail prescription sales.⁶

The quantity of drugs prescribed by physicians has also grown.⁷ The number of prescriptions dispensed in retail pharmacies grew 17% from 2000 to 2001.⁸ Illinois pharmacies dispense a total of 127.9 million prescriptions annually, an average of 10.2 prescriptions per capita.⁹ (Note: Prescriptions include all products dispensed in retail pharmacies, including new prescriptions and refills, and does not include over-the-counter items.)

Prescription Drug Coverage

Many Americans do not have health insurance, and many of those with insurance do not have a prescription drug coverage benefit. About 15% of the Illinois population, or 1.7 million Illinois citizens, do not have health insurance. According to a Kaiser Family Foundation Study, one quarter of those who do have health insurance report that they do not have prescription drug coverage through their insurance plan.

The elderly are more likely to use larger quantities of prescription drugs and use them with greater frequency. While Medicare provides insurance for people over age 65, historically, it has not provided a prescription drug benefit. Medicare is scheduled to provide drug coverage, but relief remains to be seen.¹² A total of 38% of the elderly report they do not have any prescription drug coverage, and Medicaid has provided drug

benefits to only 10% of the Medicare population.¹³ A limited number of low-income individuals, including seniors, are eligible to receive Medicaid, which covers prescription drugs.

On December 8, 2003, the president signed into law the Medicare Prescription

Drug Improvement and Modernization Act of 2003. This Act goes into effect January

1, 2006. It will provide limited drug coverage to Medicare beneficiaries. Prior to 2006, the Medicare Prescription Drug Discount Card and Transitional Assistance Program will make available a discount drug card to help seniors with their prescriptions. It will also provide annual \$600 credits to qualified low-income older persons to pay for prescription drugs. Medicare now publishes detailed information comparing the prices of most prescription drugs. The data is available on a Web site, www.medicare.gov.

Seniors with limited incomes have problems paying for their prescriptions. An estimated 7.6 million seniors without drug coverage have incomes below \$20,900.¹⁵ The Kaiser study also found that 16% of the elderly say they have not filled a prescription because of the cost; 21% say they have had to give up things to buy prescription drugs; and 9% say they have had to give up basic necessities to pay for their medications.¹⁶

Factors Affecting Drug Costs

More Prescriptions

Beginning in the 1990s, the private insurance industry moved toward managed care health plans, or HMOs. By providing outpatient drug benefits, these third-party payers are largely responsible for the increase in drug spending. Patients have more of an

opportunity to request prescription drugs, with small co-payments typically costing patients only \$5 or \$10 per prescription.¹⁷ HMOs employ Pharmacy Benefit Managers (PBM) who negotiate lower drug costs for their members. Sometimes the savings PBMs negotiate are not passed on to consumers.

The incidence of chronic conditions has increased in recent years due to a less healthy and an aging population.¹⁸ The drugs for chronic conditions must be taken regularly and for long periods of time, which has increased the number of drugs prescribed. In addition, doctors are diagnosing and treating these chronic illnesses at a higher rate than in the past and have access to a wider variety of drugs to treat chronic illness.

Drug manufacturers heavily market newly approved drugs to doctors and consumers, thereby contributing to the increase in the number of drugs prescribed.¹⁹ The U.S. Food and Drug Administration (FDA) approved 42 new drugs in 2003²⁰, and these drugs are typically more expensive than the older or generic drugs.²¹ One study found that the 50 best-selling drugs (44% of all prescriptions) had an average cost of \$71.56, while all other drugs cost an average of \$40.11.²² In addition, patients are taking more prescribed "lifestyle drugs," such as Viagra, which improve life by making the patient more comfortable, rather than by fighting disease.²³ Two drugs, Levitra and Cialis, similar to Viagra, were approved by the FDA in 2003.²⁴

Drug Advertising and Other Promotion

Whether you watch T.V. or simply walk down the street, you know that direct-to-consumer (DTC) advertising of prescription drugs, including advertising via television, print, radio, billboards, and the Internet, has increased significantly. This increase was spawned in 1997 when the FDA relaxed restrictions on certain drug company advertisements. Spending on DTC advertising rose 35% from 1999 to 2000.²⁵ Studies have shown that consumers often obtain drugs from their physicians due at least in part to seeing an advertisement for that drug.²⁶ Pharmaceutical companies contend that drug prices are high due to the large amount of money put into research and development of drugs. The truth is that pharmaceutical corporations spend much more on advertising and marketing than on research and development.²⁷ In 2001 the top nine pharmaceutical companies spent \$45 billion on marketing, advertising, and administration (27%) and \$19 billion on research and development (11%), with profits of \$31 billion (18%).²⁸ The drug companies' profit margin of 18% is higher than any other industry in America. Table 1 depicts the revenue allocation of those companies.

Pharmaceutical drug companies continue to promote their drugs through detailing and sampling aimed at physicians and other health care professionals.²⁹ "Detailing" is the promotion of manufacturer drugs by company sales representatives who target

Table 1
Pharmaceutical Corporation Revenue Allocation, 2001¹

Company	Total Revenue (in billions)	Marketing/ Advertising/ Administration	Research & Development	Profit
Merck & Co., Inc.	\$47.7	13%	5%	15%
Pfizer, Inc.	\$32.3	35%	15%	24%
Bristol-Myers Squibb Company	\$19.4	27%	12%	27%
Abbott Laboratories	\$16.3	23%	10%	10%
Wyeth	\$14.2	37%	13%	16%
Pharmacia Corporation	\$13.9	44%	16%	11%
Eli Lilly & Co.	\$11.5	30%	19%	24%
Schering-Plough Corporation	\$9.8	36%	13%	20%
Allergan, Inc.	\$1.7	42%	15%	13%
Total (dollars in billions)	\$166.7	27% \$45.4	<i>11%</i> \$19.1	<i>18%</i> \$30.6

¹ Source: Families USA, 2002. Data obtained from the annual financial reports submitted to the Security and Exchange Commission (SEC).

physicians. "Sampling" is the practice of providing drug samples to physicians during visits by sales representatives. Other efforts include advertising in journals, exhibiting at medical conferences, and holding "educational" meetings. ³⁰

Price Variation

The prices of prescription drugs may vary greatly from pharmacy to pharmacy. Another study of Illinois pharmacies completed by Retiresafe.org found that at 27 pharmacies, prices of prescription drugs varied an average of 111% and varied up to 477% on certain drugs.³¹ A similar study in Missouri found that prudent shopping could save an average of 10% on brand name drugs and 81% on generics.³² Another study of retail pharmacies in upstate New York found that prices differed substantially even

among independent pharmacies in a small town.³³ On average, the lowest price was 50% less than the highest price. The potential dollar savings exceeded \$10 for over half of the prescriptions in the study. A third of the variation in prices could be attributed to higher costs for convenience, such as location and hours of operation.³⁴

Usually, generic drugs are considerably less expensive than their brand name counterparts. In 2000, the average retail price for a brand name drug was over three times the price of a generic drug. That is an average of \$65 for a brand name compared to \$19 for a generic.³⁵ Consumers may not be aware of a generic option for their prescription medication, so they spend a lot more than necessary.

Price Comparison

Price shopping is one commonsense way to save money on prescriptions, given their high and varying costs. One study found that by comparison shopping, consumers without insurance could meet and, in some cases, beat the prices obtained by those with insurance. In fact, consumers spending their own money paid less more often than customers with insurance for the 39 most commonly prescribed drugs.³⁶ Another study on shopping for drugs found that aggressive shopping could reduce the price of drugs by 90%.³⁷

The study also suggested strategies to save money, including comparing prices, substituting generics, opting for over-the-counter medication, taking advantage of discounts or assistance programs, using mail ordering, and splitting pills. "Pill splitting" is the act of purchasing medications at twice the dosage prescribed and then splitting

them in half. Higher dosage drugs are cheaper than drugs in lower dosages, and since many drugs come in tablet form, which are often scored down the middle, pill splitting can be an easy way to save money.

Although price shopping can save consumers money, few take the time to do it.

A study that looked at consumer searches for prescription drugs estimated that only 5% to 10% of customers price shopped for prescription drugs.³⁸ Those with the highest propensity to price shop were those requiring maintenance medications (such as for cholesterol) or medications typically used by females (such as oral contraceptives). The study also estimated that the cost of conducting an exhaustive price search is approximately \$15 for the average consumer. Costs associated with searching include travel and phone calls. A National Association of Chain Pharmacy Stores study found that 86% of adults have all their prescriptions filled at the same pharmacy, which suggests little price shopping.³⁹

Since price shopping for prescription drugs saves money, it stands to reason that consumers would benefit from public policies that promote price shopping by reducing its costs. The study on consumer searches concluded that reductions in search costs would lead to at least some "gains in consumer welfare." This report attempts to promote those gains by providing Illinois consumers with information to encourage and assist with comparison price shopping in order to obtain the best price for their prescription drugs and save money.

METHODOLOGY

According to the Department of Professional Regulation, there are a total of 2,472 registered pharmacies in Illinois. (Note: Pharmacies include retail and other pharmacies, such as hospitals, university health centers, and ambulatory care.) In this study, the Office of the Attorney General mailed surveys to all of those pharmacies along with a letter from the Attorney General. The surveys were mailed to pharmacies over a sixmonth period from July 2003 to January 2004. Two follow-up mailings were sent to pharmacies that had not responded to the original mailing. In addition, reminder phone calls were made following the mailing attempts.

This survey was based on similar state surveys of prescription drugs. It asked for the current retail prices of 29 frequently prescribed drugs. The drugs were selected in part through recommendations made by the Office of the Illinois Attorney General's Health Care and Antitrust Bureaus and through review of similar surveys completed in Maine and Arizona. The original survey asked for the prices of 30 drugs but was reduced to 29 when Prilosec became available for purchase without a prescription. Table 2 outlines information on the prescription drugs in the survey. The list includes 19 brand name drugs and ten generic drugs. Pharmacies were instructed to provide the retail price for each drug minus any discounts provided for senior citizens. However, seniors are not necessarily offered discounts available at a pharmacy and the onus is on them to inquire about savings. In addition, only a small portion of the population—those over 65 years old—would qualify for the savings. Prices may therefore cost even more than what

Table 2
Description of Prescription Drugs Used in Survey

Brand or Generic Name	Pharmaceutical Company or Generic	Therapeutic Category	Form	Quantity	Dosage
Actos	Takeda	Anti-diabetic agent	Tablet	30	15 mg
Albuterol ¹	Generic	Respiratory agent	Inhaler	1 (17 gm)	90 mg
Celebrex	Searle	Anti-inflammatory agent	Capsule	30	200 mg
Coumadin	Bristol-Myers Squibb	Anti-coagulant agent	Tablet	30	5 mg
Cozaar	Merck	High blood pressure treatment	Tablet	30	50 mg
Digoxin	Generic	Cardiac treatment	Tablet	30	0.125 mg
Flomax	Boehriger Ingelheim	Prostate treatment	Capsule	30	0.4 mg
Fosamax	Merck	Osteoporosis treatment	Tablet	4	70 mg
Furosemide	Generic	Diuretic agent	Tablet	30	40 mg
Glucophage	Bristol-Myers Squibb	Anti-diabetic agent	Tablet	30	500 mg
Glyburide	Generic	Anti-diabetic agent	Tablet	30	2.5 mg
Humulin N	Eli Lilly & Company	Anti-diabetic treatment	Bottle	1 (10 mL)	U-100 ²
Isosorbide Mononitrate	Generic	Cardiac treatment	Tablet	30	60 mg
Lanoxin	GlaxoSmithKline	Cardiac treatment	Tablet	30	0.125 mg
Levothyroxine Sodium	Generic	Synthetic thyroid agent	Tablet	30	0.1 mg
Lipitor	Parke-Davis	Cholesterol lowering agent	Tablet	30	10 mg
Lisinopril	Generic	High blood pressure treatment	Tablet	30	10 mg
Metoprolol Tartrate	Generic	Beta blocker	Tablet	30	50 mg
Omeprazole	Generic	Ulcer/GERD treatment	Capsule	30	20 mg
Pepcid	Merck	Ulcer/GERD treatment	Tablet	30	20 mg
Plavix	Bristol-Myers Squibb	Anti-platelet agent	Tablet	30	75 mg
Premarin	Wyeth	Estrogen replacement	Tablet	30	0.625 mg
Prevacid	TAP Pharm	Ulcer/GERD	Capsule	30	30 mg
Synthroid	Abbott	Synthetic thyroid agent	Tablet	30	0.1 mg
Terazosin	Generic	High blood pressure treatment	Capsule	30	5 mg
Toprol XL	Astra Zeneca	Beta blocker	Tablet	30	50 mg
Vioxx	Merck	Anti-inflammatory/Analgesic	Tablet	30	25 mg
Xalatan	Pharmacia & Upjohn	Glaucoma treatment	Solution	1 (2.5 mL)	.005%
Zoloft	Pfizer	Antidepressant	Tablet	30	50 mg

¹ Complete name is Ipratropium Bromide/Albuterol Sulfate.

was reported by the pharmacies.

The survey is located in Appendix A and the accompanying letter is located in Appendix B. The first survey did not specify the quantity of medicine, such as 30 tablets, and so respondents wrote in a quantity or did not specify a quantity. The data with no quantity indicated could not be included in this study because accurate comparisons could not be made. This problem was corrected in the second survey and quantities were provided.

² Doses of insulin are measured in units. U-100 insulin contains 100 units/ mL (1mL=1cc).

Respondents

A total of 233 pharmacies returned surveys—a response rate of 9.4%. A total of 12 surveys were excluded from the sample. Eleven surveys came from non-retail pharmacies, such as hospitals or university health centers, and one survey came from an out-of-state pharmacy in Indiana, so the final sample size of this study is 221. Although the response rate is low, similar drug pricing studies have had much smaller sample sizes.

A series of studies co-sponsored by RetireSafe.org, called Prescription Challenge, surveyed pharmacies in seven states, including Illinois, and compared prices for commonly prescribed medicines. Their Illinois study, however, surveyed only 27 pharmacies in the eight largest cities. Public Citizen sponsored a survey of 13 areas across the country including Chicago. Again, the survey had relatively small sample sizes and the Chicago study surveyed only 23 pharmacies. Other states that have completed price comparison surveys include Arizona, Georgia, and Missouri, with sample sizes of 68, 27, and nine state pharmacies, respectively. The Illinois Attorney General's study, on which this report is based, was more ambitious and surveyed all the pharmacies in the state in order to represent the interests of all Illinois citizens. A total of 221 retail pharmacies from 140 different cities and 62 counties are represented.

Over half of the respondents (61%) were employed at chain store pharmacies (n=134) and 39% at independent pharmacies (n=86). Chain pharmacies are designated as a group of five or more pharmacies with one owner. There were a total of 15 different chains stores in the sample. Over one-third (37%) of the chain stores were Wal-Marts (n=50) and 27% were CVS stores (n=36).

Most (61%) of the responding pharmacies were located in urban settings, followed by rural (26%) and suburban (12%) areas. Each pharmacy was further categorized by location of their county: Northern, Southern, East Central, West Central, Cook County, and Collar County. Cook County, where the city of Chicago is located, is in Northeastern Illinois and was designated as its own regional category. A "Collar County" is one of the 5 counties that surround Cook County. About one-fourth (24%) of the respondents were from the Cook County region, followed by the Southern (19%), West Central (19%), Collar County (14%), Northern (12%), and East Central (9%) regions. Table 3 depicts the respondent pharmacy characteristics of store type, county type, and region. Appendices C and D list the designations of counties by county type and region, respectively.

Getting retail pharmacies to return completed surveys presented certain obstacles. Pharmacy staff opted not to return surveys because it was not a state requirement. Many staff from chain pharmacies deferred to their corporations, many of whom instructed their stores not to fill out the survey. In addition, pharmacies were

Table 3
Respondent Pharmacy Characteristics

Store type	Chain	134	61%
	Independent	86	39%
	Unknown	1	0.5%
	Total	221	100% ¹
County type	Urban	134	61%
	Rural	57	26%
	Suburban	27	12%
	Unknown	3	1.4%
	Total	221	100%
Region	Cook County	54	24%
	Collar County	31	14%
	Northern	27	12%
	Southern	43	19%
	East Central	20	9%
	West Central	43	19%
	Unknown	3	1.4%
	Total	221	100%

¹ Columns may not total 100% due to rounding.

reluctant to return surveys due to what appeared to be a general uncertainty about how the Office of the Attorney General would use the information and a concern about a potential reduction in business at their store if their prices were posted.

The returned surveys also generated problems. Some pharmacies did not carry all the drugs listed, so prices were not provided. Some respondents did not provide the price of the specific drugs from the companies indicated on the survey, but wrote in prices for drugs from different companies or different brand or generic drug names. These responses were excluded from the study, limiting the amount of data available. A total of 4,265 prices for 29 drugs were provided for this study. For each drug in our study, a low of 91 pharmacies and a high of 160 pharmacies provided accurate pricing data. The sample size for each drug is listed in the last column of Table 4.

Table 4
State Retail Drug Price Mean and Standard Deviation

Drug Name	Average Price	Standard Deviation ¹	N	
Actos	\$105.14	\$12.18	160	
Albuterol	\$19.89	\$5.50	91	
Celebrex	\$85.10	\$7.02	159	
Coumadin	\$27.78	\$2.85	158	
Cozaar	\$50.45	\$4.90	160	
Digoxin	\$8.99	\$1.98	129	
Flomax	\$64.05	\$5.25	159	
Fosamax	\$70.53	\$9.32	157	
Furosemide	\$7.84	\$2.16	154	
Glucophage	\$27.12	\$3.37	127	
Glyburide	\$12.69	\$3.01	154	
Humulin N	\$29.07	\$3.35	109	
Isosorbide Mononitrate	\$25.52	\$10.36	154	
Lanoxin	\$11.52	\$4.02	125	
Levothyroxine Sodium	\$12.08	\$3.60	135	
Lipitor	\$70.99	\$6.61	160	
Lisinopril	\$20.30	\$5.85	155	
Metoprolol Tartrate	\$11.19	\$3.39	149	
Omeprazole	\$105.18	\$12.88	159	
Pepcid	\$62.77	\$8.23	153	
Plavix	\$121.59	\$8.18	160	
Premarin	\$30.20	\$4.95	158	
Prevacid	\$135.01	\$9.56	159	
Synthroid	\$17.12	\$2.45	156	
Terazosin	\$32.38	\$10.43	153	
Toprol XL	\$27.15	\$3.25	158	
Vioxx	\$87.66	\$6.65	156	
Xalatan	\$57.14	\$6.23	98	
Zoloft	\$81.20	\$6.35	160	
Totals	Average \$48.88	Average \$173.88	4,265	

¹ Standard deviation is the square root of each price (x) minus the squared value of the mean (\bar{x}) divided by the sample size (n).

FINDINGS

Statewide Averages

The statewide average price for a prescription, based on our study of 29 frequently prescribed drugs, is \$48.88. The drug with the highest average price was Prevacid at \$135.01; the drug with the lowest average price was Furosemide at \$7.84. Another way to look at the average or "mean" price is the standard deviation. The

standard deviation represents the "average distance" of a drug's retail price from the mean retail price. The mean and standard deviation for the price of each of the 29 drugs are depicted in Table 4. The standard deviation can provide an understanding of the money that could be saved on a prescription. For example, the drug Omeprazole, a stomach treatment, had the highest price deviation from the mean. The price for Omeprazole deviated \$12.88 from the average price of \$105.18. Therefore, in general, a consumer could expect to save almost \$13.00 from the average price—or to be overcharged that amount. The drug Digoxin, a cardiac treatment, had the lowest price deviation from the mean price. The usual consumer could expect to be charged about the same price, only deviating about \$2.00 greater or lower than the average price of \$8.99.

Price comparisons would be more beneficial for those drugs whose standard deviation is high and less important for those drugs whose standard deviation is lower.

The average standard deviation for all 29 drugs is \$6.00, so, in general, costs deviate that amount from the mean price of any given drug.

Table 5 lists the highest and lowest price, the price difference, the percent difference, and percent savings for each drug. The highest cost of a prescription was for Actos, at \$176.50, and the lowest cost was for Isosorbide Mononitrate and Metoprolol Tartrate at \$1.99. Actos had the greatest price difference of \$142.60; Synthroid had the lowest price difference at \$14.43. The percentage of price difference is the percentage more a consumer would be paying if purchasing a medicine at the highest

Table 5 State Retail Drug Price Differences

Drug Name	Lowest Price	Highest Price	Price Difference	Percent Difference ¹	Price Savings ²
Actos	\$33.90	\$176.50	\$142.60	421%	81%
Albuterol	\$8.14	\$41.39	\$33.25	408%	80%
Celebrex	\$45.90	\$100.00	\$54.10	118%	54%
Coumadin	\$19.99	\$41.30	\$61.29	307%	52%
Cozaar	\$18.95	\$62.08	\$43.13	228%	69%
Digoxin	\$4.59	\$19.90	\$15.31	334%	77%
Flomax	\$47.99	\$75.69	\$27.70	58%	37%
Fosamax	\$7.99	\$94.82	\$86.83	1087%	92%
Furosemide	\$3.84	\$23.90	\$20.06	522%	84%
Glucophage	\$20.38	\$47.00	\$26.62	131%	57%
Glyburide	\$1.99	\$22.86	\$20.87	1049%	91%
Humulin N	\$23.00	\$43.90	\$20.90	91%	78%
Isosorbide Mononitrate	\$1.99	\$59.90	\$57.91	2910%	97%
Lanoxin	\$5.75	\$47.00	\$41.25	717%	88%
Levothyroxine Sodium	\$3.99	\$21.90	\$17.91	449%	82%
Lipitor	\$30.00	\$97.45	\$67.45	225%	69%
Lisinopril	\$2.99	\$40.11	\$37.12	1241%	93%
Metoprolol Tartrate	\$1.99	\$22.58	\$20.59	1035%	91%
Omeprazole	\$39.75	\$140.88	\$101.13	244%	72%
Pepcid	\$25.70	\$116.68	\$90.98	354%	78%
Plavix	\$101.00	\$146.74	\$45.74	45%	31%
Premarin	\$20.35	\$59.95	\$39.60	195%	66%
Prevacid	\$116.87	\$159.05	\$42.18	36%	27%
Synthroid	\$11.84	\$26.27	\$14.43	122%	55%
Terazosin	\$3.99	\$58.39	\$54.40	1363%	93%
Toprol XL	\$17.99	\$35.99	\$18.00	100%	50%
Vioxx	\$70.90	\$102.73	\$31.83	45%	31%
Xalatan	\$48.50	\$92.88	\$44.38	92%	48%
Zoloft	\$62.99	\$97.29	\$34.30	54%	35%

¹ Percent difference calculated by dividing the price difference by the lowest price and multiplying by 100. ² Price savings calculated by dividing the price difference by the highest price and multiplying by 100.

retail price rather than the lowest. In our sample the highest percent price difference for one drug was 2910%. In addition, consumers could save up to 97% on a prescription, statewide. These savings are for only a one-month supply, so one would generate an even greater savings over time on drugs treating chronic conditions.

Looking strictly at the minimum and maximum prices can be misleading. While we found big price differences between the extremes in prices, most pharmacies sell their

drugs at prices between those extremes. The most frequently occurring price, or mode, can help us understand the most common price that most pharmacies charge their customers for a particular drug. Table 6 depicts the most frequent price and total number of pharmacies that charged that particular price. (Note: Some drugs will have more than one mode.)

Table 6
Most Frequent Price of State Retail Drug Prices

Drug Name	Most Frequent Price	N
Actos	\$104.39	14
Albuterol	\$16.46	18
Celebrex	\$84.59	9
Coumadin	\$27.89	9
Cozaar	\$50.93	7
Digoxin	\$8.99	22
Flomax	\$62.46	14
Fosamax	\$80.59	7
Furosemide	\$8.99	32
Glucophage	\$24.83	9
Glyburide	\$14.32	34
Humulin N	\$28.89	13
Isosorbide Mononitrate	\$17.72	15
Lanoxin	\$14.68 & \$8.99	44
Levothyroxine Sodium	\$17.32, \$16.88 & \$9.99	18
Lipitor	\$70.73	8
Lisinopril	\$18.46	7
Metoprolol Tartrate	\$8.99	21
Omeprazole	\$115.99 & \$95.32	22
Pepcid	\$61.73	8
Plavix	\$130.99	8
Premarin	\$26.89	6
Prevacid	\$146.99	174
Synthroid	\$17.89	13
Terazosin	\$36.80	7
Toprol XL	\$31.59	13
Vioxx	\$93.69, \$92.99 & \$79.99	21
Xalatan	\$58.99 & \$53.09	5
Zoloft	\$81.89	10

Drug Type

Generic drugs have the same active ingredients as brand name medications. The generic versions of brand name drugs can save consumers money. Unfortunately, many

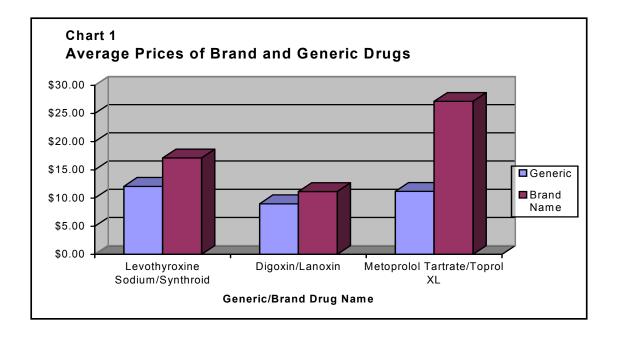
drugs do not have a less-expensive generic alternative. In this study, 19 drugs were brand name drugs and 63% of them had no generic available (n=12). Those drugs are Actos, Celebrex, Cozaar, Flomax, Fosamax, Humulin N, Lipitor, Plavix, Premarin, Prevacid, Vioxx, Xalatan, and Zoloft.⁴³ The average price of the brand name drugs in this study was 138% more than generic drugs. The average price of brand name drugs was \$61.14; for generic drugs, it was \$25.61. In other words, generics could save a consumer 77% over brand names.

Consumers may not realize that the drugs prescribed by a physician may be available for purchase without a prescription. In our sample, Omeprazole, a stomach treatment, is a generic drug, and the drug Prilosec is its non-prescription equivalent.

Typically, over-the-counter (OTC) drugs are cheaper and more readily available than prescription drugs. Consumers should see if a prescription is even necessary to obtain a particular drug.

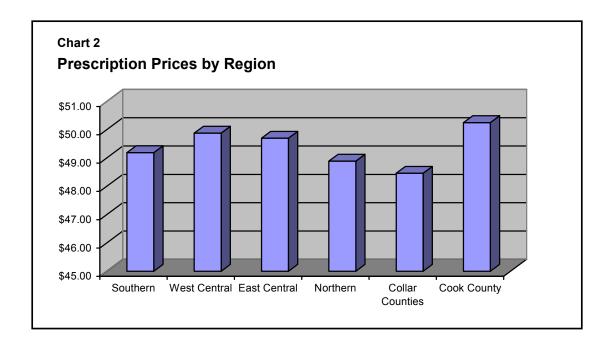
This study examined three brand name drugs (Toprol XL, Synthroid, and Lanoxin) and their generic equivalents (Metoprolol Tartrate, Levothyroxine Sodium, and Digoxin). As expected, the brand names were consistently more expensive than their generic equivalent. At an average of \$27.15, Toprol XL, used to treat hypertension and angina, was 59% more than its generic version, Metoprolol Tartrate, which cost \$11.19. Synthroid, a brand name thyroid treatment, was 42% more than its generic counterpart, Levothyroxine Sodium. Lanoxin, a treatment for congestive heart failure, was 28% more than its generic form, Digoxin. (Note: Both the quantities and dosage in milligrams were

equivalent for brand and generic drugs.) Chart 1 compares the average prices of the brand and generic drugs in this study.

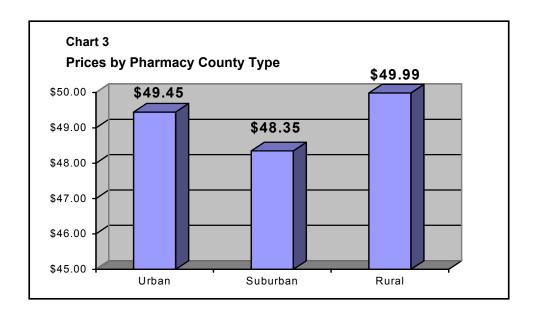


Pharmacy Location and Type

Each pharmacy was categorized according to its region in the state. The regional locations were Northern, Southern, West Central, East Central, Collar County, and Cook County. The average price of a prescription varied little by region. The Cook County region's average prescription price was the highest at \$50.25. The lowest prescription price was the Southern Region at \$49.19. Chart 2 shows the prescription prices by region.



Pharmacies were further categorized by whether their county was rural, urban, or suburban. As with region, the average price of a prescription had little variation. The average price of a prescription in an urban area was \$49.45, in a suburban area, \$48.35, and in a rural area, \$49.99. That is only a 3% difference between rural and suburban



areas. It would appear, then, that savings do not grow or shrink from one location to another or in relation to an area's population. Chart 3 depicts prescription drug prices by county type.

There was also little price variation between chain store pharmacies and independent pharmacies. The state average of the drugs for chain stores was \$49.19 and \$50.71 for independent pharmacies. That constitutes a difference of only 3% or \$1.52.

Prices in Three Illinois Cities

For price shopping to be effective, price differences for drugs must occur within a small geographic area. Comparisons of prices statewide can show trends in price variation, but individual consumers will not likely be willing to travel great distances to take advantage of cheaper prices. In this section, prescription drug prices are compared over three areas: two Illinois cities, Peoria and Murphysboro, and a section of the city of Chicago. These areas were selected because their response rates were high enough to allow meaningful price comparisons and because the three cities represent urban and rural areas in three different locations in the state—Southern, East Central, and Northeastern Illinois.

Four drugs were selected for comparison in these geographic areas: Isosorbide Mononitrate, Omeprazole, Metoprolol Tartrate, and Toprol XL. Isosorbide Mononitrate, a generic drug used to treat heart problems, was selected for comparison because it had the greatest average percent price difference of the drugs in this study. Omeprazole, also generic, is used to treat ulcers and other stomach ailments. It was selected for

comparison because it had the greatest standard deviation (average price distance) from the mean of the 29 drugs examined in this study. Finally, two drugs were selected in order to compare the price of a generic and brand name drug. Toprol XL, a brand name, and its generic counterpart, Metoprolol Tartrate, were selected because they had the greatest price difference between brand and generic drugs.

The City of Peoria

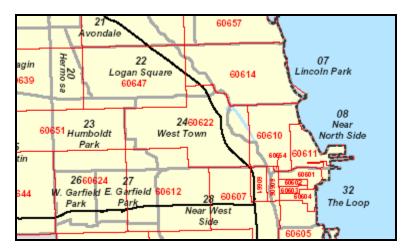
Peoria is located in the West Central region and is designated as urban. Six pharmacies from Peoria responded to the survey. All were chain stores. Three were CVS pharmacies; the other three were located in Target, Sam's Club, and Wal-Mart stores. All the pharmacies were located in either zip code 61615 or 61604.

The price of Isosorbide Mononitrate varied from \$15.72 (Sam's Club) to \$30.29 (CVS). In one city, then, you could be charged 93% more at a CVS than a Sam's Club for a one-month prescription—or save 52% off your prescription. Omeprazole had a price difference of 31%, sold for a high of \$115.99 (CVS) and a low of \$88.68 (Sam's Club). Metoprolol Tartrate cost \$8.99 at two CVS stores, whereas its brand name equivalent, Toprol XL, cost up to \$31.59 at another CVS store in the area. A consumer thus could save 72% on the cost of a prescription by substituting a generic drug over a brand name.

The City of Chicago

The area in Chicago examined in the study covers three neighboring communities. The area incorporates zip codes 60622, 60647, and 60651, located in the West Town, Logan Square, and Humboldt Park neighborhoods, respectively. Figure 1 shows this area of Chicago, which is slightly North West of the downtown area, "the Loop." A total of five pharmacies from these neighborhoods responded to our survey. Four pharmacies were independent, and one, Osco Drug, was a chain store. All the stores were located within a small area and therefore easily accessible by public transportation.

Figure 1 Chicago Zip Codes 60651, 60647, & 60622

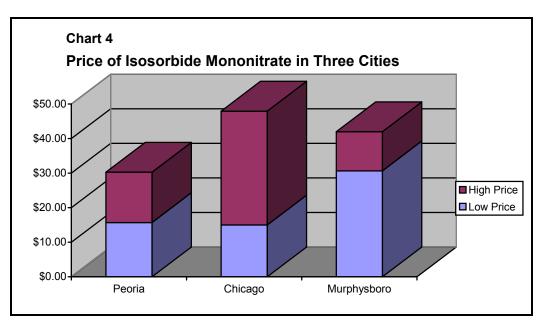


Isosorbide Mononitrate was sold for \$15.00 at one independent pharmacy and \$47.95 at another independent pharmacy—a price savings of 69%. Omeprazole was priced \$125.00 at one store and \$101.00 at another—a potential savings of \$24.00, or 24%. Generic drug Metoprolol Tartrate cost \$11.00 and brand name Toprol XL cost up

to \$32.99—a savings of 67%. These findings suggest that price shopping should be used along with generics to increase savings.

The City of Murphysboro

Murphysboro is located in Southern Illinois and is designated as rural. While only two stores responded from the city, it was selected to demonstrate that small geographic areas in non-urban areas also experience price variations. A local independent pharmacy sold Isosorbide Mononitrate for \$42.00, whereas a chain store sold the same drug for \$30.68—a savings of 27%. The same pharmacies sold Omeprazole for \$136.10 and \$108.13. A Murphysboro resident thus could save 21% on an Omeprazole prescription with little or no extra effort. The brand name drug Toprol XL sold for \$30.65, and its generic equivalent, Metoprolol Tartrate, sold for \$10.50—allowing a resident to save 60% by purchasing a generic from the less expensive pharmacy. Chart 4 depicts the high and low price of one drug, Isosorbide Mononitrate, in three cities.



RECOMMENDATIONS

Education

Uninsured consumers in need of prescription drugs need to be aware of the enormous savings available to those who price shop. This study shows that price shopping could save a consumer as much as 97% per prescription. The following are suggested ways for consumers to save money on prescription drugs, based on the literature and supported by the findings of this report. To be safe, however, consumers should always consult their physician about medications and let their pharmacist know all the prescription drugs they are taking.

- Price shopping—Compare prices among pharmacies. Make sure you let your pharmacist(s) know all the medications that you are taking or if you take multiple medications. It is suggested that you select one pharmacy to fill all your prescriptions in order to avoid a potentially dangerous drug interaction. You should ask a pharmacy to meet or beat a competitor's prices.
- **Generics**—If available, opt for cheaper generic versions of drugs. Sometimes, over-the-counter versions of drugs may also be cheaper.
- Larger quantities—Ask your doctor if you can purchase drugs three to six months at a time, if applicable, as it could be cheaper.
- **Samples**—For short-term assistance, ask your physician if he or she has drug samples available.
- Other methods of purchase—Look into possible online and mail order companies. However, make sure the companies are reputable and that you receive the exact drugs that you were prescribed. Check with the National Association of Boards of Pharmacy to determine whether a Web site is a licensed pharmacy in good standing.⁴⁴ Keep in mind that the Federal Drug Administration does not approve medications available outside the United States. There may be greater savings available within your own community.
- Drug company influence—Do not let advertising encourage you to need a
 drug that your doctor has not prescribed. Unnecessary prescriptions will add to
 your overall costs and potentially cause health complications.⁴⁵

- **Pharmacy Discounts**—Take advantage of senior citizen discounts and discount cards available at certain pharmacies. In addition, in 2003, the Illinois General Assembly passed the Senior Citizen and Disabled Persons Prescription Drug Discount Program. It established the Illinois Rx Buying Club, a program in which participating pharmacies allow seniors and disabled persons to purchase prescription drugs at lower prices without an income requirement. For more information, call the Buying Club's toll-free number at 1-866-215-3462 or 1-866-215-3479 (TTY) or visit their Web site, www.IllinoisRxBuyingClub.com.
- Drug Company Assistance Programs
 —Ask your physician about drug company programs that provide reduced cost medicines for low-income consumers.
- **Federal Assistance Programs**—Medicaid, which provides a prescription drug benefit, may be available for individuals who are below a certain income level. For information on Medicaid, go to the Web site http://www.dpaillinois.com/medical/medicaid.html or call 1-800-252-8635 (voice), 1-800-447-6404 (TTY). For those who are over age 65, Medicare now provides a limited drug benefit for those who qualify. For more information on Medicare, you can go to the Web site www.medicare.gov, or for general information, call 1-800-MEDICARE. The Web site also allows you to do prescription drug price comparisons by zip code.
- State Assistance Programs—In Illinois, the Illinois Department of Revenue administers the Circuit Breaker/Pharmaceutical Assistance Program. The program helps seniors and disabled persons pay for certain prescription drugs, but it has an income requirement. For more information, call Illinois Department of Revenue at 1-800-356-6302. Another program, SeniorCare, offers prescription drug discounts to low income seniors not covered by Medicare. Go to www.seniorcareillinois.com or call 1-800-226-0768. The Illinois Department on Aging offers information on all the state programs to help Illinois citizens purchase medications and provides a chart comparing state and federal assistance programs. You can visit their Web site at www.state.il.us/aging or call 1-800-252-8966.
- **Drug legislation**—State legislatures continue to focus on prescription drug costs. In 2003, 49 states had more than 290 bills filed to alter drug programs and policies. Each year, there may be new laws that can assist consumers in purchasing drugs. By staying updated on current prescription drug laws, you can find potential savings.

Further Study

This study collected information from more pharmacies than comparable studies in other states, but it still does not provide enough information to be useful to all consumers in Illinois. Illinois is a large state with a population of more than 12.6 million people⁵⁰ and with more than 2,000 pharmacies. This study should be completed annually, but only if the response rate can be increased. Suggestions for a greater response rate include gaining the support of the state association for pharmacists and the corporate headquarters of the major chain stores in the state. If the Attorney General's Office has endorsement from organizations and companies that represent the interests of pharmacies, the response rate should increase. Annual surveys allow for the ability to see trends in prescription drug prices.

Enough responses could allow for the creation of a project similar to one completed by Maine's Bureau of Elder Services. That state has a "prescription drug calculator" available online that allows residents of Maine to search for drug prices by drug name, county, or city.⁵¹ Their database contains prices from 95 pharmacies. The prescription calculator makes it easy for consumers to compare prices and save money.

Pharmacies are the end of the line for drug prices, and, as seen in the literature, there are many factors that affect drug prices. Further studies are needed to examine what factors influence pricing and how prices are set, from the manufacturers to the local pharmacy. These studies can provide greater insight into drug pricing and can better influence public policy initiatives on the subject.

CONCLUSION

This study has shown the considerable disparities in prescription drug prices across the state and in smaller geographic areas. The data support the combined practices of comparison shopping and using generics whenever available, especially for consumers who do not have the economic means to purchase medications prescribed to them. These practices can increase access to medications, thereby improving quality of life and even extending length of life. Educating the public on the potential benefits of price shopping is crucial. In addition, making it easier for consumers to compare prices will be key. Encouraging more pharmacies to participate in posting their prices will cut down the time and money it takes for individual consumers to do a thorough price search.

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